

# AUTHOR INDEX

## Volume 15, 1991

- Adema, C. M., 17  
Ainsworth, A. J., 53, 201  
Akiyama, Y., 83  
AlDeeb, S., 443  
Aleksandersen, M., 413  
Amen, R. I., 105  
Arizza, V., 219  
Arkoosh, M. R., 279  
Azumi, K., 1, 9
- Banerjee, A., 213  
Barnett, J. A., 117  
Basu, P. S., 213  
Bayne, C. J., 135  
Bilej, M., 263  
Biswas, M., 227  
Bodine, A. B., 383  
Boyd, R. L., 369  
Brookman, J. L., 33  
Brown, R. A., 153  
Brožek, C. M., 401
- Capley, G., 53  
Chakravarty, A. K., 423  
Charles, R., 117  
Clem, L. W., 41  
Cohen, N., 209  
Čolić, M., 443  
Croix, D. A., 189
- Damjanović, M., 443  
Datta, P. K., 213  
Datta, T. K., 213  
de Lange-de Klerk, E. S. M., 105  
Desveaux-Chabrol, J., 341  
Dexiang, C., 201  
Dieterlen-Lièvre, F., 341
- Fahey, K. J., 369  
Flory, C. M., 135
- Gendreau, M., 341  
Greenlee, A. R., 153
- Haddad, E. E., 65  
Hamuro, J., 83  
Haynes, L., 123  
Higgins, D. A., 357
- Horton, J. D., 307, 319  
Horton, T. L., 319  
Hughes, T. K., Jr., 117
- Infante, A. J., 189  
Isaković, K., 443  
Ishii, S-I., 1, 9
- Janse, E. M., 437  
Jensen, L. B., 173  
Jeurissen, S. H. M., 437
- Kaattari, S. L., 279  
Kiepuski, A., 349  
Kimpton, W. G., 393  
Koch, C., 173
- Landsverk, T., 413  
Lassegues, M., 27  
Lee, T.-H., 329  
Ley, R. D., 401
- Mandal, C., 227  
Mashaly, M. M., 65, 181  
McKinney, E. C., 123  
Meuleman, E. A., 17, 105  
Mičić, M., 443  
Mitrangas, K., 369  
Mookerjea, S., 227
- Nagpurkar, A., 227  
Nicander, L., 413
- Ozeki, S., 9
- Parrinello, N., 219  
Pascual, D. W., 41  
Pathak, J. P. N., 99  
Petersson, A., 143  
Pike, A. W., 295  
Pilström, L., 143  
Pospíšil, R., 263
- Quere, P., 73
- Raftos, D. A., 93  
Ramm, H. C., 369

- Ratcliffe, N. A., 33  
 Redding, T. S., 189  
 Rejnek, J., 263, 269  
 Rice, C. D., 431  
 Ristow, S. S., 153  
 Ritchie, P., 319  
 Roch, P., 27  
 Rodgers, R. S., 383  
 Rombout, J. H. W. M., 349  
 Rowland, S. M., 383  
 Rowley, A. F., 33  
  
 Samples, N. K., 189  
 Sarkar, S. K., 423  
 Schimmenti, S., 219  
 Scott, T. R., 383  
 Secombes, C. J., 295  
 Seneque, S., 393  
 Sharp, G. J. E., 295  
 Sieminski-Brodzina, L. M., 181  
 Sijtsma, S. R., 349  
 Sminia, T., 17, 105  
 Smith, E. M., 117  
 Smith, V. J., 251  
 Söderhäll, K., 251  
 Staute, K., 393  
 Stefano, G. B., 117  
 Stone, W. H., 189  
 Suzuki, M., 83  
  
 Tempelis, C. H., 329  
 Thorbecke, G. J., 73  
 Thorp, B. H., 393  
 Tijnagel, J. M. G., 105  
 Tomana, M., 269  
 Tučková, L., 263, 269  
 Turner, S. L., 319  
  
 Valembois, P., 27  
 van der Knapp, W. P. W., 17, 105  
 van der Zijpp, A. J., 349  
 van Deutekom-Mulder, E. C., 17  
 van Ginkel, F. W., 41  
 van Roozelaar, D., 437  
 VandeBerg, J. L., 189  
 Varley, C. A., 307  
  
 Ward, H. A., 369  
 Waterstrat, P. R., 53  
 Weeks, B. A., 431  
 West, C. E., 349  
 Wiesner, A., 241  
 Wilson, T. J., 369  
 Wolke, R. E., 165  
  
 Yokosawa, H., 1, 9  
  
 Ziegenfuss, M. C., 165  
 Zikán, J., 269

# KEYWORD INDEX

## Volume 15, 1991

- Absorption, 437
- Accessory cells, 135
- Achatina fulica*, snail, 227
- Affinity, 279
- Aflatoxin B<sub>1</sub>, 383
- Agammaglobulinemia, 73
- Agglutinin, 99, 227
- Allografts, 189
- Annelids, 27
- Anti-T3 mAb, 83
- Antibacterial, 27
- Antibodies, 41
- Antigen-binding molecule, 263
- Ascidian, 1, 9
  
- B cells, 393, 423
- B lymphocytes, 369
- Bacteria-agglutination, 9
- Bactericidal effect, 53
- Bat, 423
- Blood cells, 251
- Blood, 251
- Bursa, 369
  
- C3 convertase, 173
- C-reactive protein, 227
- Calcium flux, 431
- Carassius auratus*, 165
- Carbon, 437
- Catfish neutrophils, 53
- CD8<sup>+</sup> T cells, 73
- Cell cycle analysis, 383
- Cellular apoptosis, 153
- Cellular cytotoxicity, 17
- Cellular defense, 241
- Cellular necrosis, 153
- Channel catfish, 41
- Chemiluminescence, 135, 431
- Chemiluminescent response, 53
- Chemoattractant, 295
- Chemokinesis, 295
- Chemotaxis, 295
- Chicken lymphoblast, 329
- Chicken(s), 65, 73, 181, 383, 437
- Chromium release assay, 153
- Ciona*, 251
- Clone size, 279
- Cod, 143
- Coelomic fluid, 27, 269
- Comparative immunity, 189
- Complement factor B, 173
- Con A, 329
- Cortisone-resistant thymocytes, 83
- Cytokine, 401
- Cytokine bioassays, 319
- Cytotoxic mechanisms of trout NCC, 153
- Cytotoxicity, 181
  
- Diphyllbothrium*, 295
- Distribution, 413
- DNA fragmentation assay, 153
- Double negative thymocytes, 83
- Duck, 357
  
- Earthworms, 27, 263, 269
- Edwardsiella ictaluri*, 53
- ELISA, 279
- Embryonic transfer, 341
- Escherichia coli*, 241
- Evolution, 173
- Evolution of immunity, 123
  
- Fab fragments, 41
- Fetal thymocytes, 83
- Fine specificity, 279
- Fish, 165
- Flow cytometry, 307, 319
- Fluorescent microspheres, 165
  
- Gadus morhua*, 143
- Galleria mellonella*, 241
- Graft-versus-host reaction, 341
- Growth hormone, 65
- Gut, 437
  
- Halys dentata*, 99
- Heat stable lectins, 99
- Hemagglutinin, 9
- Hemal nodes, 393
- Hemimetabolous insect, 99
- Hemocyte(s), 1, 9, 17, 33, 105, 251
- Hemolymph, 213, 227
- Hemolysins, 27
- Heteroagglutinin, 99
- Host defense mechanisms, 123

- Humoral defense, 241
- Hydrogen peroxide, 201
- IBDV, 369
- IL-1 (Interleukin-1), 83, 117, 401
- IL-2 (Interleukin-2), 83
- IL-6 (Interleukin-6), 83
- Immune phylogeny, 251
- Immunocompetent cells, 423
- Immunodepression, 369
- Immunoglobulin properties, 143
- Immunoglobulins, 41
- Immunohistology, 307
- Immunological memory, 279
- Immunology, 393, 401
- Immunomodulation, 105
- Immunoparasitology, 105
- Immunopharmacology, 135
- Immunoregulation, 135
- Induction of immunity, 241
- Insect immunity, 241
- Invertebrate immunity, 251
- Invertebrate immunology, 269
- Invertebrates, 27, 117
- Kinetics, 165
- Large intestine, 413
- Latex, 241
- Lectins, 219
- Leucocyte migration, 295
- Limiting dilution analysis, 279
- Lipopolysaccharide, 1, 9, 33, 117
- Locusts, 33
- Lymnaea stagnalis*, 17, 105
- Lymph nodes, 393
- Lymphocytes, 357, 393
- Lymphoid follicles, 413
- Lymphoid organs, 437
- Lymphokine receptor, 329
- Macrophage activation, 431
- Macrophage aggregates, 165
- Macrophage-mediated cytotoxicity, 123
- Macrophages, 423
- Mannose-6-phosphate inhibition of NCC, 153
- Marsupial, 401
- Melanin, 213
- Membrane fluidity, 423
- Metalloprotease, 1
- Metamorphosis, 99
- MHC, 189
- Micrococcus luteus*, 241
- Microorganisms, 99
- Mitogen stimulation, 383
- Mitogenesis, 135
- Mitogens, 357
- Mixed leucocyte culture, 319
- Mixed lymphocyte reaction, 189
- Molluscs, 17
- Monoclonal antibody(ies), 329, 393, 443
- Monodelphis domestica*, 189
- Mononuclear cells, 181
- Mytilus edulis*, 117
- Natural cell-mediated cytotoxicity, 65
- Natural killing, 123
- NCC morphology, 153
- Neuroimmunology, 135
- Neurotransmitters, 135
- Neutrophil, 201
- Nitroblue tetrazolium, 201
- NK cells, 65, 181
- Oligosaccharides, 269
- Oncorhynchus mykiss*, 295
- Ontogenesis, 443
- Ontogeny, 413
- Opossum, 401
- Oxygen radicals, 17
- Pepsin, 41
- Peripheral blood, 181
- Phagocytosis, 17, 53, 105, 201
- Phenoloxidase, 213, 251
- Phosphorylcholine, 227
- Phosphorylcholine-binding protein, 227
- Plasma, 33
- Polymorphism, 27
- Precursor frequency, 279
- Prophenoloxidase activation, 33
- Protease inhibitor, 213
- Proteolysis, 41
- Rainbow trout, 135, 279, 295
- Rat thymus, 443
- Reactive oxygen intermediates, 431
- Regulation of cytotoxicity, 123
- Release, 219
- Respiratory burst, 135
- Response to stimulation, 263
- Scanning electron microscopy (EM), 181, 423



- Schistosome-snail compatability, 105  
 Schistosomes, 105  
 Scorpion, 213  
 Selected lines, 383  
 Serum, 143  
 Shark leukocytes, 123  
 Sheep, 393, 413  
 sIg<sup>+</sup> & sIg<sup>-</sup> cells, 319  
 SpA-binding protein, 269  
 Spontaneous cytotoxicity, 123  
 Stromal cells, 369  
 Structure, 413  
 Superoxide, 201  
 Suppression of cytotoxicity, 123  
 Suppressor T cells, 73  
 Synergism, 357  
  
 T cells, 383, 393, 423  
 T-cell development, 307  
 T-cell marker distribution, 307  
 T-cell mitogen, 319  
 TE cells, 443  
 Thymectomy, 307, 319  
  
<sup>3</sup>H-thymidine uptake, 383  
 Thymocyte maturation, 83  
 Thymocytes, 383  
 Thymus implantation, 307  
 Thyrotropine releasing hormone, 65  
 Transformation, 357  
 Transmission electron microscopy, 181  
 Tributyltin, 431  
*Trichobilharzia ocellata*, 105  
 Triiodothyronine, 65  
 Trypsin, 41  
 Tumor, 181  
 Tumor cells, 65  
 Tumor necrosis factor, 117  
 Tunicates, 219  
  
 Vertebrate erythrocytes, 99  
 Vitamin A deficiency, 349  
  
*Xenopus*, 307, 319  
  
 Yolk, 437



